

Title (en)

METHOD AND APPARATUS FOR PROCESSING SIGNAL IN MULT-ANTENNA MULTICARRIER SYSTEM

Title (de)

VERFAHREN UND VORRICHTUNG ZUR SIGNALVERARBEITUNG IN EINEM MEHRTRÄGERSYSTEM MIT MEHREREN ANTENNEN

Title (fr)

PROCÉDÉ ET APPAREIL DE TRAITEMENT DE SIGNAL DANS UN SYSTÈME MULTIPORTEUSE À ANTENNES MULTIPLES

Publication

EP 4170921 A1 20230426 (EN)

Application

EP 22203015 A 20221021

Priority

- KR 20220135812 A 20221020
- KR 20210141545 A 20211022

Abstract (en)

A communication node included in a multi-antenna multi-carrier system, when precoding matrices corresponding to some subcarriers from among subcarriers allocated to another communication node connected to the communication node are input, obtains precoding matrices for at least some subcarriers from among the allocated subcarriers by performing spherical interpolation on the input precoding matrices, maps the obtained precoding matrices for the at least some subcarriers to the subcarriers allocated to the other communication node, and performs precoding on the plurality of vector signals using the mapped precoding matrices.

IPC 8 full level

H04B 7/06 (2006.01); **H04L 27/26** (2006.01)

CPC (source: EP US)

H04B 7/0456 (2013.01 - US); **H04B 7/066** (2013.01 - EP); **H04L 5/0098** (2013.01 - US); **H04L 27/2634** (2013.01 - EP);
H04B 7/0617 (2013.01 - EP); **H04B 7/0639** (2013.01 - EP)

Citation (search report)

- [X] US 7676007 B1 20100309 - CHOI JIHOON [KR], et al
- [X] JIHOON CHOI ET AL: "Interpolation Based Unitary Precoding for Spatial Multiplexing MIMO-OFDM With Limited Feedback", IEEE TRANSACTIONS ON SIGNAL PROCESSING, IEEE, USA, vol. 54, no. 12, 1 December 2006 (2006-12-01), pages 4730 - 4740, XP011150614, ISSN: 1053-587X, DOI: 10.1109/TSP.2006.881251
- [X] TARKESH PANDE ET AL: "Reduced Feedback MIMO-OFDM Precoding and Antenna Selection", IEEE TRANSACTIONS ON SIGNAL PROCESSING, IEEE, USA, vol. 55, no. 5, 1 May 2007 (2007-05-01), pages 2284 - 2293, XP011179569, ISSN: 1053-587X, DOI: 10.1109/TSP.2006.890936

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4170921 A1 20230426; JP 2023063280 A 20230509; US 2023179272 A1 20230608

DOCDB simple family (application)

EP 22203015 A 20221021; JP 2022169725 A 20221024; US 202218049021 A 20221024